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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Kurt RYF et al.

Serial No. 09/879,187

Filed: June 13, 2001

For: FUNCTIONAL HIGH-ENERGETIC  
MATERIAL

Art Unit: 3641

Examiner: E. Miller

Atty. Docket No. 39021-172671

Customer No.

**26694**

PATENT TRADEMARK OFFICE

**PETITION TO WITHDRAW HOLDING OF ABANDONMENT, UNDER RULES  
181, 182, AND 183 AND/OR REQUEST FOR RECONSIDERATION**

**MAIL STOP PETITIONS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This paper is filed in view of U.S. Patent and Trademark Office [hereinafter "PTO"] paper dated May 6, 2004, in which the PTO held the application abandoned, on the grounds that the November 21, 2003 Applicants' paper was non-responsive (hereinafter "November 2003 paper"). In Applicants' view, the holding of abandonment in this case is contra the mandate of 35 U.S.C. §132.

The fee required by Rules 181/182/183 is enclosed. Should the fee be missing or should additional fees be due, please charge the same to Deposit Account 22-0261 and advise our office accordingly. References to Rule 182 and 183 is invoked as the "abandonment" reasons are based on "not-elected" claims.

Also enclosed are copies of (1) Applicants' November 2003 paper (with PTO receipt-date stamp) including a DECLARATION by I. Wasley, and (2) Applicants'

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January 28, 2004 paper. These are filed pursuant to SPE Carone's suggestion on May 14, 2004.

The May 6, 2004 PTO paper followed applicants' April 29, 2004 Status Inquiry. Applicants submit that the November 2003 paper was responsive. However, apparently, the Examiner disagrees with the underlying reasons for traversal. Under the facts of this case, the PTO has the authority to allow the case under 35 U.S.C. 131 or the mandate under 35 U.S.C. 132 to examine and to allow/reject an application claim(s). Applicants petition for compliance with the statute. In applicants' view, there is no abandonment in fact. Cf. MPEP 711.03.

This petition is filed under Rules 181-183, as applicants' view the holding of abandonment by the U.S. Patent as ultra vires.

The May 6, 2004 PTO paper stated that the PTO had received the November 2003 responsive paper. The PTO PAIR page indicates that almost six (6) months passed between PTO receipt of the November 2003 paper and the May 6, 2004 PTO paper.

## FACTS

The May 6, 2004 PTO paper now holds the November 2003 paper non-responsive to the April 10, 2003 Office Action.

Applicants' November 2003 response was 17 pages, responded to the restriction requirement, and presented claim amendments, with traversals in reply to Section 112 rejections. It also enclosed the DECLARATION of Isolde Wasley, a translator. The response at page 15 indicated that there was at least one rejection which could not be addressed by traversal as the PTO had advanced no expressed reasons for the rejection. Applicants also responded to the paragraph 4 of the April 2003 Office Action, statement, "[A]s broadly claimed, the subcombination is not patentable." (April 10, 2003 Office Action, page 2, paragraph 4) ["The Patent Office cannot simply hold a claim not patentable, in the absence of competent evidence; no such evidence is of record or has been applied against any claim."]

## ARGUMENT

THE ONLY U.S. PTO REASONS EXPRESSED NOW FOR THE ALLEGATION OF NON-RESPONSIVENESS WERE ADDRESSED by applicants in the NOVEMBER 2003 PAPER. Before noting the basis of the abandonment applicants underscore that they do rely on the statements in the November 2003 solely as evidence of the fact that “applicant persists in his claim for a patent”; and thus the application “shall be re-examined” [35 U.S.C. 132].

The only express reasons to refuse entry of the November 2003 paper, appear in paragraph 4, page 2, of the May 6, 2004 PTO paper. The reasons relate to the word “Powder” in Claim 17 and the “content” of claim 18. Claims 17 and 18 are “not-elected claims.”

With respect to Claims 17 and 18, the PTO stated in the May 6, 2004 paper:

“The ostensible amendment to claims 17-18... are not reasonably responsive to the rejection.... The term “Powder” was stated to be a problem in the rejection as to many claims including claim 14, *e.g.*/, and which term “Powder” was deleted at the end of claim 14, and deleted from claims 15 and 16. Thus, applicants acquiesced as to the rejection in this aspect. However, this identical term “Powder” was inserted into claim 17, and retained in claim 17. Thus, the reply including arguments and amendments to the claims cannot reasonably be found to be complete or bona fide. Further, there is no argument at all for claim 17 as to 35 U.S.C. 112, 2<sup>nd</sup> ... and the remarks about claim 18 do not address the substantive content of the rejection of all the claims for indefiniteness. “Comprising” in claim 18 does not address any omitted claim element from claim 18.”  
[Page 4, PTO Paper dated May 6, 2004]

**I. APPLICANTS STATEMENTS RELATING TO “POWDER”,  
APPEAR AT PAGE 16 OF THE NOVEMBER 2003 PAPER**

“Applicants’ November 2003 paper at page 16 states there appears to be a misunderstanding of the phrase “powder dough”. The word “Powder” in this connection does not directly relate to the physical consistency but to the utility. The “powder dough” is meant to indicate a (wet) mixture, *i.e.*, a dough that is to be transformed into a green grain (“powder”, *e.g.*, “gun powder”). Claim 16 was amended to delete “Powder” to narrow the issue. With respect to “power dough”, applicants advise as follows:

The following chart is illustrative:

Nitrocellulose dough containing IV, V or VI



**Extrusion-Process**



**Green grain**



**“Emulsion”-Process**



High energy propellant powder

To narrow the issue “powder dough” is replaced simply by  
“dough”.

[ Page 16, November 30 Paper]

**II. APPLICANTS’ STATEMENTS IN THE NOVEMBER 2003 PAPER  
RELATING TO CLAIM 18 APPEAR AT PAGE 13 OF THE  
NOVEMBER 30 PAPER**

The Examiner objected to language in claim 18, alleging Claim 18 omits essential elements. Applicants’ statements in the November 2003 paper relating to Claim 18 at page 13, of the November 2003 paper applicants stated:

“Claim 18 was amended to replace “with” by-comprising--, to emphasize a point. The terms “comprise” and “comprising” lend to an interpretation open to the inclusion of unrecited elements. Cf. MPEP Section 2111.03. Applicants have reviewed the PTO reliance on Section 2172.01 of the MANUAL OF PATENT EXAMINING PROCEDURE concerning the Examiner’s allegation that there are “missing elements”. In applicants’ view, the PTO has provided no evidence that substantiates the premise that “elements are missing”. In applicants’ view, there is a great legal difference between “missing elements” and “unrecited elements”. In applicants’ view, claim 18 includes the elements of Claim 14. By virtue of Claim dependency claim 18 contains all the material elements of the generic invention. Cf. 35 U.S.C. 112, fourth paragraph second sentence. Accordingly, in applicants’ view the grounds of rejection of Claim 18 was either moot and/or unripe.”

The PTO has made NO attempt to identify the alleged ‘missing element’ in Claim 18, and thus no prima facie rejection under 35 U.S.C. 112 exists on the record.

### III. MISCELLANEOUS OBJECTIONS

A. In paragraph 5 of the May 6, 2004 PTO paper, the PTO objected to the January 28, 2004 paper. It was filed in view of the client’s December 19, 2003, letter indicating an error in the specification [which had nothing to do with the rejections in the Office Action of April 2003]. The Applicants’ January 28, 2004 paper presented an AMENDMENT to the specification [to the effect that the polyester described at paragraph 40 bridging pages 18-19 was not in fact water soluble.] The January 28, 2004 paper was entitled SUPPLEMENTAL AMENDMENT; however, if the client had not determined that a correction of the specification pages 18-19 was appropriate, the November 2003 paper would stand independently of any later filing on January 28, 2004.

B. In paragraph 3 of the May 6, 2004 PTO paper, the PTO alludes to the reasons for the filing of the November 2003 paper. The PTO had held that the previous response to the April 2003 paper non-responsive. The November 2003

paper was the second response to the April 10, 2003 Office Action. In paragraph 3 the PTO relies on MPEP §714.03, specifically, the “pertinent part”, “once an inadvertent omission is brought to the attention of the applicant, the question of inadvertence no longer exists. Therefore, a second Office Action giving another new (1) month time period to supply the omission would not be appropriate under 35 CFR 1.135 (c)”. [Paragraph 3 of the May 6, 2004 PTO paper]

The April 1003 PTO paper was a Restriction Requirement. Notwithstanding applicants election (of Claims 1-13), the Examiner is rejecting claims which are non-elected and basing a holding of abandonment on what could be claims withdrawn from consideration.

### CONCLUSION

The PTO Examiner might not agree with applicants’ response; but PTO disagreement with applicants’ treatment of an issue presupposes response rather than “omission” and “inadvertence” as recited in MPEP §714.03. Scrutiny of the Examiner’s reasoning at page 3 hereof will reveal that applicants did not “acquiesce”, but rather by applicants’ chart presented an explanation of “powder dough”, which appears in the claims. Taking the May 6, 2004, position on the issue of “powder”, certain claims should be allowed. As to claim 18, no “missing element” has been identified by the U.S. PTO. The “reasons” required by 35 USC 132 are missing from the record, concerning the rejection of Claim 18. The holding of abandonment is ultra vires.

Applicants remarks and/or amendments in traversal are evidence to support the word “persists” in the statutory Section 35 U.S.C. 132.



In the applicants' view, the statute provides that an application can be allowed [35 U.S.C. 131] or "rejected" and "reexamined". [35 U.S.C. 132] Accordingly, applicants request allowance and/or examination.

Date: May 19 2004



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Venable Filing Number

Attorney/L. . . /mdc  
 PTO Due Date: N/A  
 DATE FILED : JANUARY 28, 2004

Atty. Docket No: 39021-172671

Title: Functional High-Energetic Material

Application No: 09/879,187

Patent No. :

Trademark:

Opposition/Cancellation No:

Filing Date: June 13, 2001

Issue Date:

Trademark Reg. No:

The following items were received from Venable, Washington, D.C., by the U.S. Patent &amp; Trademark Office:

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| <input type="checkbox"/> Declaration of Isolde Wasley; w/ attached 3 pages of German Dictionary  |                                  |
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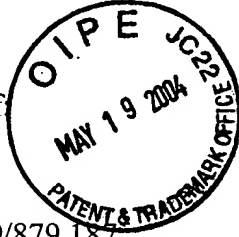
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of  
Kurt RYF et al.

Application No. 09/879,187

Filed: June 13, 2001

For: FUNCTIONAL HIGH-ENERGETIC  
MATERIAL



Art Unit: 3641

Examiner: E. Miller

Atty. Docket No. 39021-172671

Customer No.

26694

PATENT TRADEMARK OFFICE

**SUPPLEMENTAL AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This AMENDMENT is presented to be considered in conjunction with previous response filed in reply to Paper No. 11.

**Amendments to the Specification** begin on page 2.

**Remarks** begin on page 15 of this paper.

## IN THE SPECIFICATION

Please amend paragraph number "[40]", which bridges pages 18-19 as follows [A clean sheet of amended paragraph [40] appears on the next consecutive page]:

[40] The batch is then heated to a temperature of 85 °C and is pre-soaked for 15 hours under constant stirring and maintaining of the temperature. Following this, a mixture containing 12.5 kg nitroglycerin and 0.25 kg 2-nitrodiphenyl amine, dissolved in 60 liter ethanol, is added drop by drop during a 30-minute interval at a temperature of 80 °C. The treatment then continues for 2 1/4 hours at an optimum baking mixture setting (propellant powder bed completely suspended). During a 15-minute interval, a suspension containing 1.97 kg of a non-solid polyester that is highly viscous at room temperature and has a molecular weight of 3000 in 30 kg water (the polyester ~~is water-soluble and~~ functions as desensitizer) is subsequently added drop by drop. The mixture is then allowed to process for another 2 hours at a temperature of 80 °C and under constant stirring. Following this, the pressure in the reactor tank is slowly reduced to 600 mbar and a portion of the solvent is distilled out of the batch. The vacuum is then broken and the batch cooled down to room temperature. The bottom valve is opened and the remaining liquid components are allowed to drain out. The remaining moist powder mass is stirred continuously with 100 liter fresh water over a period of 2 hours while the heating is turned off. Following this, the liquid components are again drained out through the bottom valve and the remaining moist powder matrix is removed from the reactor.

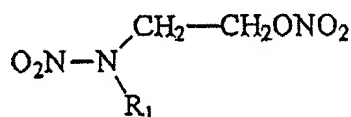
CLEAN COPY OF AMENDED PARAGRAPH [40]

[40] The batch is then heated to a temperature of 85 °C and is pre-soaked for 15 hours under constant stirring and maintaining of the temperature. Following this, a mixture containing 12.5 kg nitroglycerin and 0.25 kg 2-nitrodiphenyl amine, dissolved in 60 liter ethanol, is added drop by drop during a 30-minute interval at a temperature of 80 °C. The treatment then continues for 2 1/4 hours at an optimum baking mixture setting (propellant powder bed completely suspended). During a 15-minute interval, a suspension containing 1.97 kg of a non-solid polyester that is highly viscous at room temperature and has a molecular weight of 3000 in 30 kg water (the polyester functions as desensitizer) is subsequently added drop by drop. The mixture is then allowed to process for another 2 hours at a temperature of 80 °C and under constant stirring. Following this, the pressure in the reactor tank is slowly reduced to 600 mbar and a portion of the solvent is distilled out of the batch. The vacuum is then broken and the batch cooled down to room temperature. The bottom valve is opened and the remaining liquid components are allowed to drain out. The remaining moist powder mass is stirred continuously with 100 liter fresh water over a period of 2 hours while the heating is turned off. Following this, the liquid components are again drained out through the bottom valve and the remaining moist powder matrix is removed from the reactor.

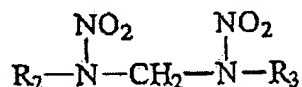
IN THE CLAIMS:

Claims 1-13 (canceled).

14. (Previously presented) High energetic material with layered grain structure, comprising a green powder which is unprocessed nitrocellulose powder and into which is introduced a high energy plasticizer and a polymeric deterrent, wherein the high-energy plasticizer has the structure I or II, wherein  $R_1 = C_1-C_{10}$ -alkyl,  $C_1-C_{10}$ -alkoxy or aryl,  $R_2$  and  $R_3$  independently of each other is  $C_1-C_5$ -alkyl or  $C_1-C_5$  alkoxy and is used in amounts of 5-20% relative to the green powder[.]:

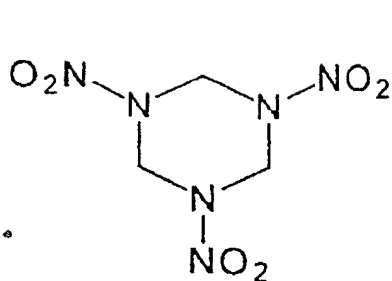


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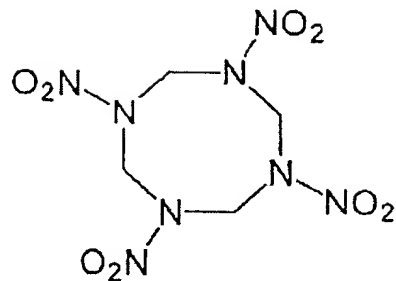


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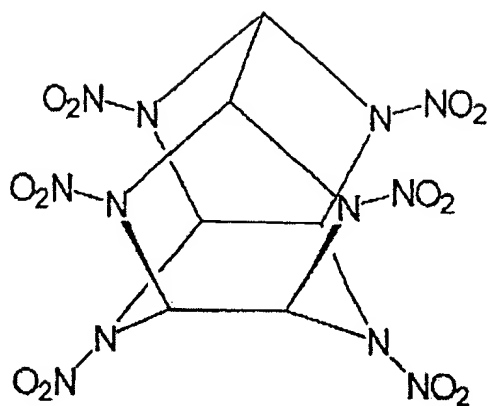
15. (Previously presented) A high-energetic material according to claim 14, characterized in that the green powder is produced by extruding a solvent-containing dough of nitrocellulose, wherein the solvent-containing dough contains at least one compound of the structures IV, V, or VI, which at least one compound comprises 10-60% of the dough (on a dry basis) wherein the formula of structures IV, V or VI are as follows:



(IV)



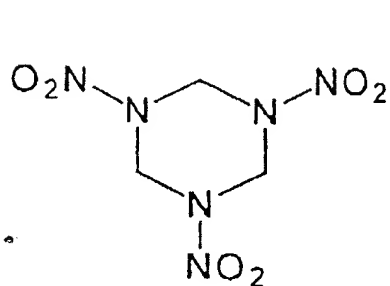
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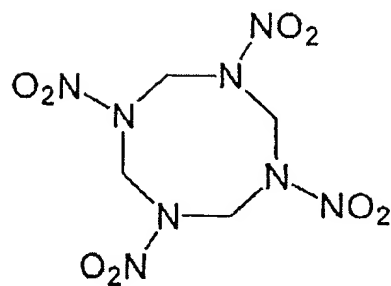
(VI)

16. (Previously presented) A green grain for producing a functional high-energetic material with layered grain structure, containing a high-energy plasticizer and a polymeric deterrent, wherein the green grain is formed by extruding a solvent-containing dough of nitrocellulose, characterized in that the solvent containing dough comprises at

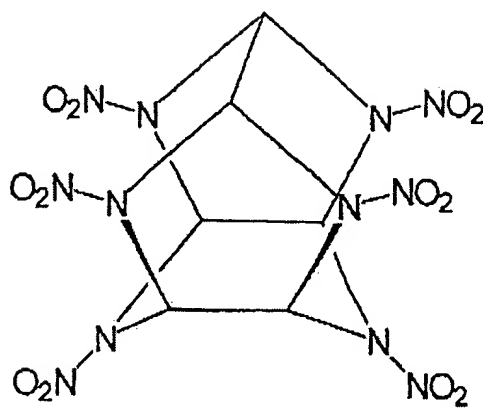
least one compound with the structure IV, V or VI and which comprise 10-60 % of the dough (dry basis)



(IV)



(V)



(VI)

17. (Previously presented) A propellant powder comprising a high-energetic material in accordance with claim 14.



18. (Previously presented) Ammunition comprising a propellant powder according to claim 17.

19. (Previously presented) A method for producing a functional, high-energetic material having a layered grain structure and containing an energetic plasticizing agent and a polymeric desensitizing agent, comprising the steps of:

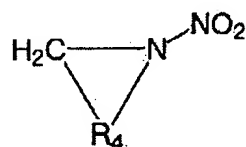
- a) providing an energetic plasticizing agent in the form of a solution or in the form of an emulsion comprising water;
- b) providing a polymeric desensitizing agent in the form of a solution or in the form of an emulsion comprising water;
- c) providing a receptive grain which will absorb an emulsion,
- d) diffusing at least one emulsion comprising said energetic plasticizing agent or said polymeric desensitizing agent into the receptive grain to produce the layered grain structure.

20. (Previously Presented) A method according to claim 19, wherein the receptive grain comprises at least 80% nitrocellulose with a nitrogen content of 11-13.5%.

21. (Previously Presented) A method according to claim 19, wherein the receptive grain has a cylindrical structure with a diameter to length ratio of between 0.5 and 2.0, an outside diameter between 0.5 and 10 mm and contains at least one hole.

22. (Previously Presented) A method according to claim 21, wherein said at least one hole has a hole diameter between 0.03 and 0.7 mm.

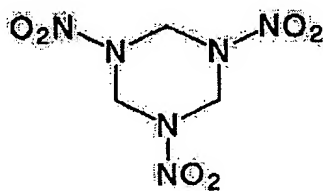
23. (Previously Presented) A method according to claim 19, which further comprises producing the receptive grain by compressing a solvent-containing powder dough of nitrocellulose in a molding press or by extruding it, wherein the solvent-containing powder dough contains at least one substance with the general structure



(III)

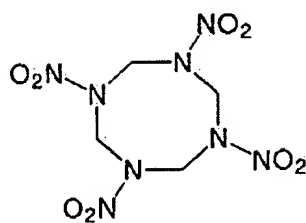
wherein  $R_4 = (-CH_2-N-NO_2)_n$  and  $n = 2$  or  $3$ , wherein said at least one substance is present in an amount of 5-80% based on a dry weight of the powder dough.

24. (Previously Presented) A method according to claim 23, wherein said at least one substance has a structure selected from the group consisting IV, V and VI , wherein IV is



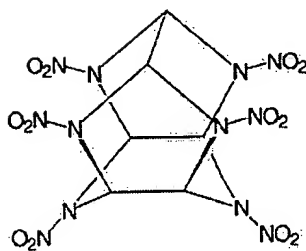
(IV)

wherein V is



(V)

and wherein VI is



(VI)

and wherein the said at least one substance is present in the absorbent grain in an amount which is between 10-60%.

25. (Previously Presented) A method according to claim 19, wherein a diffusion depth of at least one of said energetic plasticizing agent or said polymeric desensitizing agent in the receptive grain is in the range of 100-500  $\mu\text{m}$ .

26. (Previously Presented) A method according to claim 19, further comprising the steps of:

- a) adding the high-energy plasticizing agent in an organic solvent to a mixture of receptive grains in water;
- b) admixing the desensitizing agent in water.

27. (Previously Presented) A method according to claim 26, wherein the adding of the high-energy plasticizing agent and the admixing of the desensitizing agent in water is undertaken at a temperature between 20-85°C.

28. (Previously Presented) A method according to claim 27, further comprising

a) pre-soaking receptive grains in an organic solvent in a reactor;

b) stirring during a period of 4-24 hours at a temperature of 20-85°C prior to adding the solution or emulsion of high-energy plasticizing agent, which is liquid at room temperature.

29. (Previously Presented) A method according to claim 26, wherein the receptive grains are placed into 1 to 5 times the amount by weight of water.

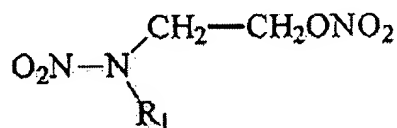
30. (Previously Presented) A method according to claim 26, which is conducted in a reactor tank, wherein after the step of admixing the desensitizing agent,

a) the pressure in the reactor tank is reduced to 400-800 mbar during a period of 2-6 hours to allow liquid components to drain out through a strainer in a bottom of the reactor tank and

b) a resulting powder mass is dried with warm air.

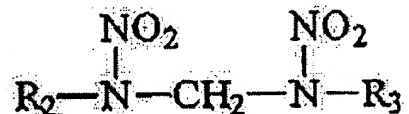
31. (Previously Presented) A method according to claim 30, wherein, after drying the resulting powder mass, 0.01-2% graphite is added in a polishing drum to the powder mass to obtain a bulk propellant powder with a bulk density > 1000 g/l.

32. (Previously Presented) A method according to claim 19, wherein the high-energy plasticizing agent is selected from the group consisting of nitroglycerine, diethylene glycol dinitrate, a substance with the structure



(I)

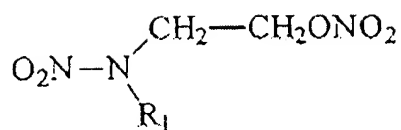
and a substance with the structure



(II)

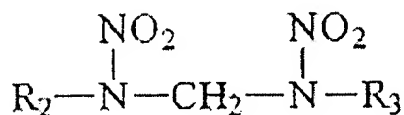
wherein  $\text{R}_1 = \text{C}_1\text{-C}_{10}\text{-alkyl}$ ,  $\text{C}_1\text{-C}_{10}\text{-alkoxy}$  or aryl,  $\text{R}_2$  and  $\text{R}_3$  independent of each other  $\text{C}_1\text{-C}_5\text{-alkyl}$  or  $\text{C}_1\text{-C}_5\text{-alkoxy}$  and wherein the energizing plasticizing agent is used in amounts of 5-20% relative to the receptive grains.

33. (Previously Presented) A method according to claim 32, characterized in that the high-energy plasticizing agent is selected from the group consisting of the structure.



(I)

and



(II)

with  $\text{R}_1 = \text{C}_1\text{-C}_4$  alkyl, methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, or t-butyl, and with  $\text{R}_2$  and  $\text{R}_3$  independent of each other being  $\text{C}_1\text{-C}_2$  (alkyl).

34. (Previously Presented) A method according to claim 1, characterized in that the polymeric desensitizing agent is an organic ether or ester compound with a molecular weight of between 100-100,000.

35. (Previously Presented) The method of Claim 33, wherein each of  $\text{R}_2$  and  $\text{R}_3$  is independently methyl or ethyl.

36. (Previously Presented) The method of Claim 33, wherein  $\text{R}_1$  is alkyl, methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, or t-butyl.

37. (Previously Presented) The method of Claim 35 wherein R<sub>1</sub> is alkyl, methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, or t-butyl.--

REMARKS

Reconsideration is respectfully solicited.

Applicants, by their German representatives, have advised that the phrase "water soluble" at page 19 is not correct. The client stated that the polyester of MW 3000 is not soluble in water; moreover, at least one inventor has indicated that they know of no polyester which is in fact water soluble. Accordingly, deletion of that term appears proper.

An early allowance is respectfully solicited.

Respectfully submitted,

Date: January 28 2004



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116532

Venable Filing Number

Attorney/LA

MVS/mdc

PTO Due Date:

November 21, 2003

DATE FILED:

NOVEMBER 21, 2003

Atty. Docket No: 39021-172671

Title: Functional High-Energetic Material

Application No: 09/879,187

Patent No.:

Trademark:

Opposition/Cancellation No:

Filing Date: June 13, 2001

Issue Date:

Trademark Reg. No:

The following items were received from Venable, Washington, D.C., by the U.S. Patent &amp; Trademark Office:

## U.S. PTO FEES ENCLOSED

- ☐ Transmittal Letter
- ☐ Fee Transmittal Letter
- ☐ New U.S. Provisional Application ( pages of specification/claims)
- ☐ Formal Drawings ( sheets, Figs.)
- ☐ Invention Declaration
- ☐ U.S. National Stage Application of PCT Application
- ☐ Translation of International Application
- ☐ New U.S. TM Application ( specimens)
- ☐ Rule 53(d) Continued Prosecution Application
- ☐ Substitute Specification
- ☐ Rule 53(b) Continuation or Divisional Application (attach copy of specification, claims, drawings & declaration)
- ☐ Priority Document-Cert. Copy of Appln.#: ; Country
- ☐ Date Filed:
- ☐ Request for Continued Examination (RCE) under 37 CFR 1.114
- ☐ Request for Reconsideration
- ☐ Application Data Sheet
- ☐ Assignment w/PTO Form 1595 Cover Sheet
- ☐ IDS w/PTO Form-1449 ( references)
- ☐ Response
- ☒ ☒ Supplemental Amendment and Interview Summary / ☐ Preliminary Amendment
- ☐ Petition/Request for Extension of Time (one mo. ext.)
- ☒ Declaration of Isolde Wasley; w/ attached 3 pages of German Dictionary
- ☐ Appeal Brief (in triplicate)
- ☐ ☐ Reply Brief (in triplicate) / ☐ Request for Oral Hearing
- ☐ Confirmation of Hearing Petition
- ☐ Issue Fee Transmittal
- ☐ Certificate of Correction
- ☐ Maintenance Fee Transmittal
- ☐ Power of Attorney
- ☐ Response to Notice to File Missing Parts
- ☐ Response to Notice to File Missing Requirements
- ☐ Response to Restriction Requirement
- ☐ Petition to Revive
- ☐ Sequence Listing - CDR Enclosed? ☐ Yes ☐ No
- ☐ Status Inquiry
- ☐ Request for Non-Publication
- ☐ Request to Rescind Non-Publication Request
- ☐ Terminal Disclaimer
- ☐ TM Statement of Use
- ☐ Extension of Time ( mo. ext.)
- ☐ Declaration Under 8
- ☐ Declaration Under 8 and 15
- ☐ Return Postcard
- ☐ Other: (Please describe below)

- ☐ Filing Fee
- ☐ Surcharge Fee
- ☐ Additional Claim Fee
- ☐ Recordation/Indexing Fee
- ☐ IDS Fee
- ☐ Extension Fee
- ☐ Notice of Appeal Fee
- ☐ Brief on Appeal Fee
- ☐ Oral Hearing Request Fee
- ☐ Petition Fee
- ☐ Issue Fee
- ☐ Publication Fee
- ☐ Maintenance Fee
- ☐ TM Statement of Use
- ☐ 8 Affidavit Fee
- ☐ 8 and 15 Affidavit
- ☐ TM Renewal Application Fee
- ☐ Notice of Opposition Fee
- ☐ TM Extension of Time Fee

Total Fees Paid

\*If the Deposit Account was used, was a copy of this form sent to Accounting?

☐ Check Number Attached

☐ Charge Deposit Account No. 22-0261\*

☐ Yes ☐ No

116532

Venable Filing Number

Attorney/LAA: MVS/mdc  
 PTO Due Date: November 21, 2003  
 DATE FILED: NOVEMBER 21, 2003

Atty. Docket No: 39021-172671Title: Functional High-Energetic MaterialApplication No: 09/879,187

Patent No.:

Trademark:

Opposition/Cancellation No:

Filing Date: June 13, 2001

Issue Date:

Trademark Reg. No:

The following items were received from Venable, Washington, D.C., by the U.S. Patent &amp; Trademark Office:

**U.S. PTO FEES ENCLOSED**

- |   |                                  |
|---|----------------------------------|
| <input type="checkbox"/> Transmittal Letter   | _____ Filing Fee                 |
| <input type="checkbox"/> Fee Transmittal Letter   | _____ Surcharge Fee              |
| <input type="checkbox"/> New U.S. Provisional Application ( _____ pages of specification/claims)  | _____ Additional Claim Fee       |
| <input type="checkbox"/> Formal Drawings ( _____ sheets, _____ Figs.)   | _____ Recordation/Indexing Fee   |
| <input type="checkbox"/> Invention Declaration  | _____ IDS Fee                    |
| <input type="checkbox"/> U.S. National Stage Application of PCT Application   | _____ Extension Fee              |
| <input type="checkbox"/> Translation of International Application   | _____ Notice of Appeal Fee       |
| <input type="checkbox"/> New U.S. TM Application ( _____ specimens)   | _____ Brief on Appeal Fee        |
| <input type="checkbox"/> Rule 53(d) Continued Prosecution Application   | _____ Oral Hearing Request Fee   |
| <input type="checkbox"/> Substitute Specification   | _____ Petition Fee               |
| <input type="checkbox"/> Rule 53(b) Continuation or Divisional Application ( <i>attach copy of specification, claims, drawings &amp; declaration</i> )                | _____ Issue Fee                  |
| <input type="checkbox"/> Priority Document-Cert. Copy of Appln.#: _____ ; Country _____   | _____ Publication Fee            |
| <input type="checkbox"/> Date Filed: _____  | _____ Maintenance Fee            |
| <input type="checkbox"/> Request for Continued Examination (RCE) under 37 CFR 1.114   | _____ TM Statement of Use        |
| <input type="checkbox"/> Request for Reconsideration  | _____ 8 Affidavit Fee            |
| <input type="checkbox"/> Application Data Sheet   | _____ 8 and 15 Affidavit         |
| <input type="checkbox"/> Assignment w/PTO Form 1595 Cover Sheet   | _____ TM Renewal Application Fee |
| <input type="checkbox"/> IDS w/PTO Form-1449 ( _____ references)  | _____ Notice of Opposition Fee   |
| <input type="checkbox"/> Response   | _____ TM Extension of Time Fee   |
| <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Supplemental Amendment and Interview Summary / <input type="checkbox"/> Preliminary Amendment |                                  |
| <input type="checkbox"/> Petition/Request for Extension of Time (one mo. ext.)  |                                  |
| <input checked="" type="checkbox"/> Declaration of Isolde Wasley; w/ attached 3 pages of German Dictionary  |                                  |
| <input type="checkbox"/> Appeal Brief ( <i>in triplicate</i> )  |                                  |
| <input type="checkbox"/> <input type="checkbox"/> Reply Brief ( <i>in triplicate</i> ) / <input type="checkbox"/> Request for Oral Hearing                            |                                  |
| <input type="checkbox"/> Confirmation of Hearing Petition   |                                  |
| <input type="checkbox"/> Issue Fee Transmittal  |                                  |
| <input type="checkbox"/> Certificate of Correction  |                                  |
| <input type="checkbox"/> Maintenance Fee Transmittal  |                                  |
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| <input type="checkbox"/> Response to Notice to File Missing Parts   |                                  |
| <input type="checkbox"/> Response to Notice to File Missing Requirements  |                                  |
| <input type="checkbox"/> Response to Restriction Requirement  |                                  |
| <input type="checkbox"/> Petition to Revive   |                                  |
| <input type="checkbox"/> Sequence Listing - CDR Enclosed? <input type="checkbox"/> Yes <input type="checkbox"/> No  |                                  |
| <input type="checkbox"/> Status Inquiry   |                                  |
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| <input type="checkbox"/> TM Statement of Use  |                                  |
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| <input type="checkbox"/> Declaration Under 8 and 15   |                                  |
| <input type="checkbox"/> Return Postcard  |                                  |
| <input type="checkbox"/> Other: ( <i>Please describe below</i> ) _____  |                                  |

Total Fees Paid

☐ Check Number \_\_\_\_\_ Attached  
☐ Charge Deposit Account No. 22-0261\*  
☐ Yes ☐ No

\*If the Deposit Account was used, was a copy of this form sent to Accounting?

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Kurt RYF et al.

Application No. 09/879,187

Filed: June 13, 2001

For: FUNCTIONAL HIGH-ENERGETIC  
MATERIAL

Art Unit: 3641

Examiner: E. Miller

Atty. Docket No. 39021-172671

Customer No.

26694

PATENT TRADEMARK OFFICE

## SUPPLEMENTAL AMENDMENT and INTERVIEW SUMMARY

Honorable Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This AMENDMENT is presented in response to Paper No. 11, holding previously filed papers non-responsive.

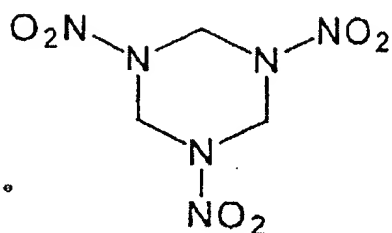
Also attached hereto is the DECLARATION of Isolde Wasley.

Please amend the application as follows:

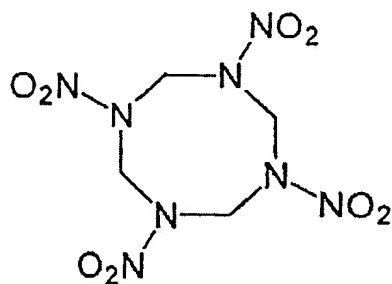
**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks** begin on page 11 of this paper.

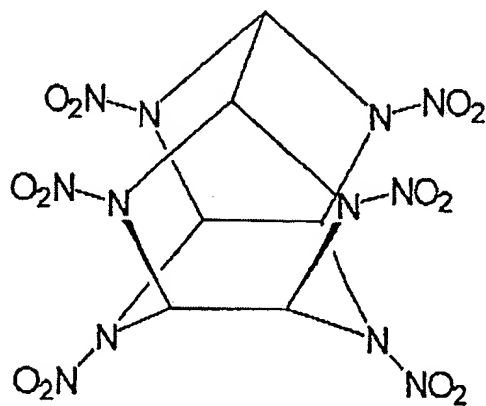
the powder dough (on a dry basis)[[.]] wherein the formula of structures IV, V or VI are as follows:



(IV)



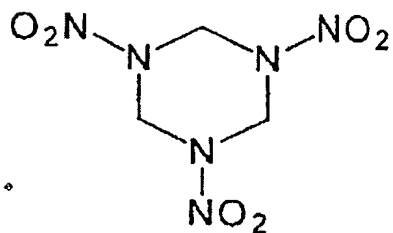
(V)



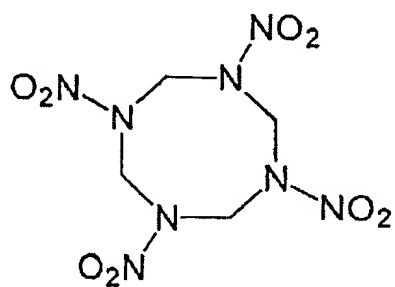
(VI)

16. (Currently amended) A green grain for producing a functional high-energetic material with layered grain structure, containing a high-energy plasticizer and a polymeric deterrent, wherein the green grain is formed by extruding a solvent-containing

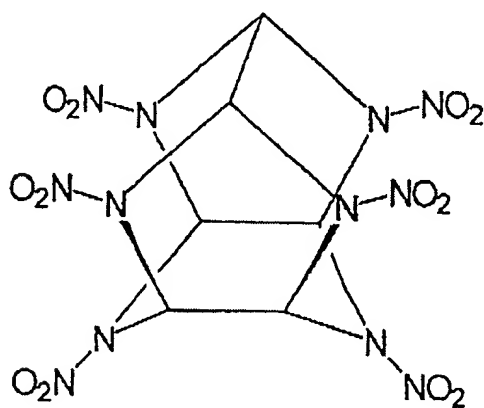
powder dough of nitrocellulose, characterized in that the solvent containing powder dough comprises at least one compound with the structure IV, V or VI and which comprise 10-60 % of the powder dough (dry basis) [[.]]



(IV)



(V)



(VI)

17. (Currently amended) A propellant powder comprising a high-energetic material in accordance with claim 14.

18. (Currently amended) Ammunition comprising a propellant powder according to claim 17.

19. (Currently Amended) A method for producing a functional, high-energetic material having a layered grain structure and containing an energetic plasticizing agent and a polymeric desensitizing agent, comprising the steps of:

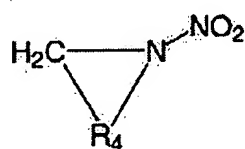
- a) providing an energetic plasticizing agent in the form of a solution or in the form of an emulsion comprising water;
- b) providing a polymeric desensitizing agent in the form of a solution or in the form of an emulsion comprising water;
- c) providing a receptive grain which will absorb an emulsion,
- d) diffusing at least one emulsion comprising of said energetic plasticizing agent or said polymeric desensitizing agent into the receptive grain to produce the layered grain structure.

20. (Previously Added) A method according to claim 19, wherein the receptive grain comprises at least 80% nitrocellulose with a nitrogen content of 11-13.5%.

21. (Previously Added) A method according to claim 19, wherein the receptive grain has a cylindrical structure with a diameter to length ratio of between 0.5 and 2.0, an outside diameter between 0.5 and 10 mm and contains at least one hole.

22. (Previously Added) A method according to claim 21, wherein said at least one hole has a hole diameter between 0.03 and 0.7 mm.

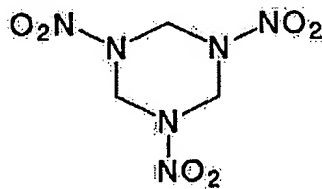
23. (Previously Added) A method according to claim 19, which further comprises producing the receptive grain by compressing a solvent-containing powder dough of nitrocellulose in a molding press or by extruding it, wherein the solvent-containing powder dough contains at least one substance with the general structure



(III)

wherein  $\text{R}_4 = (-\text{CH}_2-\text{N}-\text{NO}_2)_n$  and  $n = 2$  or  $3$ , wherein said at least one substance is present in an amount of 5-80% based on a dry weight of the powder dough.

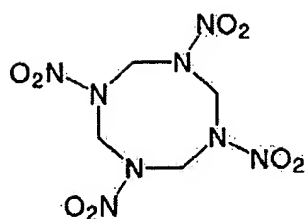
24. (Previously Added) A method according to claim 23, wherein said at least one substance has a structure selected from the group consisting IV, V and VI, wherein IV is



(IV)

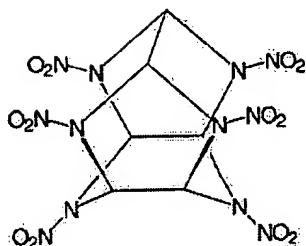
;

wherein V is



(V)

and wherein VI is



(VI)

and wherein the said at least one substance is present in the absorbent grain in an amount which is between 10-60%.

25. (Previously Added) A method according to claim 19, wherein a diffusion depth of at least one of said energetic plasticizing agent or said polymeric desensitizing agent in the receptive grain is in the range of 100-500  $\mu\text{m}$ .

26. (Previously Added) A method according to claim 19, further comprising the steps of:

a) adding the high-energy plasticizing agent in an organic solvent to a mixture of receptive grains in water;



- b) admixing the desensitizing agent in water.

27. (Previously Added) A method according to claim 26, wherein the adding of the high-energy plasticizing agent and the admixing of the desensitizing agent in water is undertaken at a temperature between 20-85°C.

28. (Previously Added) A method according to claim 27, further comprising

- a) pre-soaking receptive grains in an organic solvent in a reactor;
- b) stirring during a period of 4-24 hours at a temperature of 20-85°C prior to adding the solution or emulsion of high-energy plasticizing agent, which is liquid at room temperature.

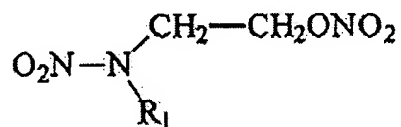
29. (Previously Added) A method according to claim 26, wherein the receptive grains are placed into 1 to 5 times the amount by weight of water.

30. (Previously Added) A method according to claim 26, which is conducted in a reactor tank, wherein after the step of admixing the desensitizing agent,

- a) the pressure in the reactor tank is reduced to 400-800 mbar during a period of 2-6 hours to allow liquid components to drain out through a strainer in a bottom of the reactor tank and
- b) a resulting powder mass is dried with warm air.

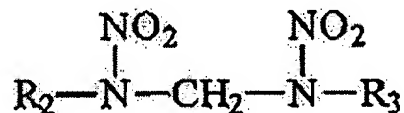
31. (Presently Added) A method according to claim 30, wherein, after drying the resulting powder mass, 0.01-2% graphite is added in a polishing drum to the powder mass to obtain a bulk propellant powder with a bulk density > 1000 g/l.

32. (Previously Added) A method according to claim 19, wherein the high-energy plasticizing agent is selected from the group consisting of nitroglycerine, diethylene glycol dinitrate, a substance with the structure



(I)

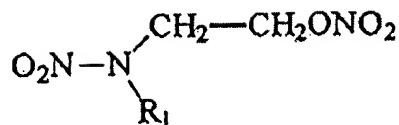
and a substance with the structure



(II)

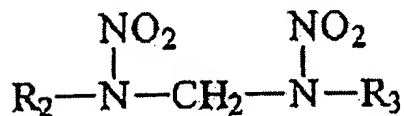
wherein  $\text{R}_1 = \text{C}_1\text{-C}_{10}\text{-alkyl}$ ,  $\text{C}_1\text{-C}_{10}\text{-alkoxy}$  or aryl,  $\text{R}_2$  and  $\text{R}_3$  independent of each other  $\text{C}_1\text{-C}_5\text{-alkyl}$  or  $\text{C}_1\text{-C}_5\text{-alkoxy}$  and wherein the energizing plasticizing agent is used in amounts of 5-20% relative to the receptive grains.

33. (Previously Added) A method according to claim 32, characterized in that the high-energy plasticizing agent is selected from the group consisting of the structure.



(I)

and



(II)

with  $\text{R}_1$  =  $\text{C}_1$ - $\text{C}_4$  alkyl, methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, or t-butyl, and with  $\text{R}_2$  and  $\text{R}_3$  independent of each other being  $\text{C}_1$ - $\text{C}_2$  (alkyl).

34. (Previously Added) A method according to claim 1, characterized in that the polymeric desensitizing agent is an organic ether or ester compound with a molecular weight of between 100-100,000.

35. (Previously Added) The method of Claim 33, wherein each of  $\text{R}_2$  and  $\text{R}_3$  is independently methyl or ethyl.

36. (Previously Added) The method of Claim 33, wherein  $\text{R}_1$  is alkyl, methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, or t-butyl.

37. (Previously Added) The method of Claim 35 wherein R R<sub>1</sub> is alkyl, methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, or t-butyl.--

### REMARKS

Reconsideration of the outstanding Office Action is respectfully solicited. The undersigned thanks the Examiner for confirming on November 14, 2003 that although found non-responsive, the AMENDMENTS of July 9 and July 31, 2003 are in fact "entered".

The claims herein are based on the original claims as follows-

Amended Claim	Pending Claim
19	1, 6
20	2
21	3
22	3 ("preferably-part")
23	4
24	4 ("preferably-part")
25	5
26	6

Amended Claim	Pending Claim
27	6 ("preferably-part")
28	7
29	8
30	9
31	10
32	11
33	12
34	13
35	15
36	12
37	12

Claims 1-16 have been renumbered as Claim 19 *et seq.* Claim 35 is based on prior Claim 15. Claims 36 and 37 are based on Claim 12.

Applicants German representatives have reviewed the Paper of October 21, 2003 and respectfully reiterate the traverse of the restriction requirement. For the purpose of responsiveness, Applicants provisionally elect the subject matter of Group I including Claims 1-13, which are present herein as new claims 14 *et seq.*

In Applicants' view, claim 17 and claim 18 cannot be classified as either independent or distinct; and search of one would require a search coextensive with the field of search for the other.

Applicants also traverse the statement in paragraph 4 of the Office Action, to the effect, "[A]s broadly claimed, the subcombination is not patentable." (April 10, 2003 Office Action, page 2, paragraph 4.) The Patent Office cannot simply hold a claim not patentable, in the absence of competent evidence; no such evidence is of record or has been applied against the claim.

Applicants respectfully traverse the rejection of the claims under 35 U.S.C. §112. The claims have been rewritten in view of the Examiner's criticisms at page 4 of the Office Action, lines 4, *et seq.*[4/10] and at page 2 *et seq.* of the October 21 Office Action.

In Claim 14, the word "green" has been explained in accordance with page 6 paragraph 12 of the specification ("unprocessed..."), which was one of the proposals advanced in the recent PTO Office Action. Claim 15 has been reworded to recite "at least one compound" is of the recited formulae (to eliminate reference to "substance(s)") and has been reworded at the end of the claim to recite "dry basis". Claim 16 has been amended similarly.

The Declaration of Isolde Wasley is attached hereto to explain the word "receptive"; this explanation is implicit in the specification at page 7, paragraph 14 as originally filed.

Claim 18 was amended to replace "with" by --comprising--, to emphasize a point. The terms "comprise" and "comprising" lend to an interpretation open to the inclusion of unrecited elements. Cf. MPEP Section 2111.03. Applicants have reviewed the PTO reliance on Section 2172.01 of the MANUAL OF PATENT EXAMINING PROCEDURE concerning the Examiner's allegation that there are "missing elements". In applicants' view, the PTO has provided no evidence that substantiates the premise that "elements are missing". In applicants' view, there is a great legal difference between "missing elements" and "unrecited elements". In applicants' view, claim 18 includes the elements of Claim 14. By virtue of Claim dependency claim 18 contains all the material elements of the generic invention. Cf. 35 U.S.C. 112, fourth paragraph second sentence. Accordingly, in applicants' view the grounds of rejection of Claim 18 was either moot and/or unripe.

With respect to Claim 19 the Examiner alleged, that the passive voice was used and questioned the requirement of sequence of steps. The method is recited as "comprising ..steps of" The "verb forms" thereafter, including "providing" and "diffusing" are gerunds; gerunds are verb forms, and those verb forms are used as nouns. If the "passive " voice referred to by the PTO has other application, applicants respectfully request notice. The requirement of the instant claims is that at least one of the energetic plasticizing agent and the polymeric desensitizing agent be used in the form of an emulsion.

Applicants turn to certain issues raised in the April 10 Office Action. With respect to the April 10 Office Action it is noted that revision, of Claims 2-4 and 6 [presented herein as Claims 19-24 to delete the terms, "particular", "in particular" and "preferably", overcomes the Examiner's criticisms of those terms for indefiniteness. Revision of Claim 5 [now Claim 25] is to reflect that the reagents diffuse into the grains of powder to certain depth(s); furthermore because of the dependency of Claim 26 [on Claim 19, neither of which refer to diffusion depth] the issue concerning diffusion depth is unripe, for the following reason: whereas previous Claim 6 depended from Claims 1-5, and claim 5 did in fact refer to diffusion depth, that is not the case with respect to the present slate of claims.

The issues on page 4—first **full** paragraph-- of the April 10 Office Action relate to indefinite/definite articles. Indefinite articles replace the definite article in the phrases "the receptive grain [claim 1, lines 3-4, now Claim 19]; claim 6, line 2 [now claim 19] "the high energy plasticizer" and a "diffusion depth"; Claim 6 lines 3-4 "untreated green powder" claim 7 line 2 "the reactor"; Claim 9 lines 4 [now Claim 30 ], the reactor tank", and line 6 "the remaining liquid components"; and claim 10 line 2, "the dried powder mass". In addition the Examiner criticized claim 3, for the recitation "the grain" alleging

that it is not clear if this refers to the Claims 1 line 4 "receptive grain" or the line 1 product "layered grain" . Moreover, the Examiner's attention is directed to Isolde Wasley's declaration relating to the definition of a German word which can be translated as "receptive" or "absorptive".

Further criticism [in the next full paragraph bridging pages 4-5 of April 10 Office Action] appears with respect to claim 1 insofar as "and/or" related to both plasticizer and deterrent. With respect to claim 1 line 4 objection was lodged with respect to "watery emulsion". That objection is overcome by language in Claim 19 "emulsion comprising water". In Claim 13 [now Claim 34] the molecular weight range is alleged to be improper and not understood (by the PTO). It is impossible to address this issue, since no reasons are advanced under statutory provisions.

In Claim 14 "reference to green powder is indefinite.."the language in Claim 14 has been expressly explained as "unprocessed" and is supported by application specification at page 6, lines five from the bottom of the page.

The Examiner objected to language in claim 14, specifically alleging the term "substance is used for different inconsistent possibilities" in lines 3 and 5. In response, the word "substance" has been replaced by --compound-- when "substance" embraces specific organic compounds.

The Examiner objected to language in e.g. claim 15, line 4 recitation relating to "10-60%". The language has been edited to state that the percent is on "dry basis".



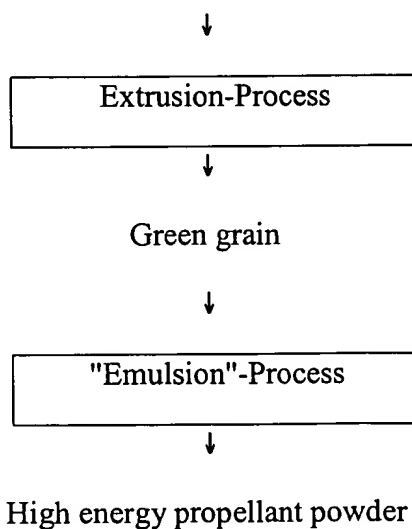
The Examiner objected to language in claim 16 lines 5 and 6, alleging the same problem with "substance" occurs again. This has been addressed in claim 16, as in claim 14.

The Examiner objected to language in claim 16 line 6, "is the substance in powder form or dough form". Whether the substances IV, V or VI are in powder form or dough form is not relevant. Claim 16 only requires the presence of these substances in the "power dough". In fact these substances have a crystalline form.

There appears to be a misunderstanding of the phrase "powder dough". The word "powder" in this connection does not directly relate to the physical consistency but to the utility. The "powder dough" is meant to indicate a (wet) mixture, i.e., a dough that is to be transformed into a green grain ("powder", e.g., "gun powder"). Claim 16 was amended to delete "powder" to narrow the issue. With respect to "powder dough", applicants advise as follows:

The following chart is illustrative:

Nitrocellulose dough containing IV, V or VI



To narrow the issue "powder dough" is replaced simply by "dough".

The Examiner objected to language in method claims for use of the passive voice. As explained above, the "steps" do not appear to be in the passive voice. Rather the steps of the method are individually expressed as gerunds.

The Examiner objected to language in claim 18, alleging Claim 18 omits essential elements. This is addressed above (MPEP 2111.03). The PTO has made to attempt to identify the alleged missing element.

The Examiner objected to language in claim 17 what is "functional material"; the phrase has been amended.

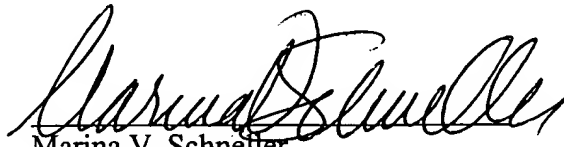
The Examiner objected to language in claim 17 specifies a name e.g. "propellant for the same stuff from claim 14"---violates 112, 4<sup>th</sup> paragraph and is indefinite. In applicants view, the PTO has no ground of rejection or identifiable reason to make such a statement justification for a grounds of rejection. Applicants rely on MPEP §2111.03 which states that an open claim can read on unrecited elements; this presumes compliance with Section 112.

An early allowance is respectfully solicited.

Respectfully submitted,

Date:





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## **DECLARATION**

**I, Isolde U. Wasley, employed at VENABLE LLP, 575 7<sup>th</sup> Street, N.W., Washington, DC 20004-1601, hereby declare that:**

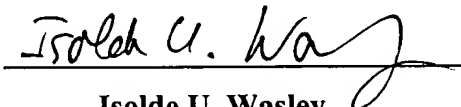
**I am familiar with the English and German languages, am a professional translator from German to English and from English to German.**

**The German word "AUFNAHMEFÄHIG" can be translated as "receptive" or "absorptive." In the general dictionary LANGENSCHIEDT ENCYCLOPAEDIC MURET-SANDERS GERMAN DICTIONARY, it is translated as "absorbing, active, receptive," "absorbent, absorptive" and having "absorption power" (copy attached – 3 pages). In the technical dictionary LANGENSCHIEDTS FACHWÖRTERBUCH CHEMIE UND CHEMISCHE TECHNIK, it is translated as "absorptive, absorbent" (copy attached – 3 pages).**

**To the best of my knowledge and belief, the above statement is accurate and fairly reflects the contents and meaning based on the original documents.**

**I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.**

**Executed on November 14, 2003.**

  
**Isolde U. Wasley**

Langenscheidt's  
Dictionary of  
Chemistry and  
Technology

English

Revised edition

Dresden

# Langenscheidts Fachwörterbuch Chemie und chemische Technik

Deutsch-Englisch

*Fünfte, bearbeitete und erweiterte Auflage*

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## Vorwort zur fünften Auflage

Die vorangegangenen Auflagen des Englisch, haben bei Nutzern im 4. Auflage nun vergriffen ist, entschlossen mit der Bearbeitung der 5. Auflage eine 5., bearbeitete und erweiterte Auflage herauszugeben. Dabei wurden etwa 2000 Neueinträge in Biochemie und physikalische Chemie ergänzt. Neben anderen wurden (and Applied Chemistry) herausgegeben. Die Autoren waren auch bei der Begleitung der Arbeiten. Helfende Kritik und Vorschläge zu entgegen und bitten, diese an die Berlin, zu richten.

## Preface to the Fifth Edition

The previous editions of our German-English dictionary have found a very loyal usership. In preparation of the fifth edition to accompany the revision of the dictionary, approximately 2000 new entries have been added in the fields of biochemistry and physical chemistry. In carrying out this revision, the accuracy and reliability which we would like to thank the Langenscheidt Fachverlag for the expert guidance during the course of the preparation of the manuscript. The authors welcome all constructive criticism. Users should send their comments to the publisher, 28-30, D-10827 Berlin.

## Aufkonzentrieren

**Aufkonzentrieren** *n* concentration (of an acid); (pap) fortification (of the cooking acid)  
**aufkrausen** (tann) to pommel  
**Aufladung** *f* [elektro]statische electrostatic charging, static electrification  
**Auflagehumus** *m* raw humus, mor  
**Auflageplatte** *f* bed plate  
**auflaufen/auf das Sieb** (pap) to enter onto the wire  
**Auflaufkasten** *m* (pap) flow (stuff, breast) box, headbox  
**Auflaufleder** *n* (pap) apron  
**Auflaufrahmen** *m* (pap) deckle  
**Auflichtelektronenmikroskop** *n* direct-light electron microscope  
**Auflichtmikroskopie** *f* direct-light microscopy  
**auflockern** to loosen [up] (a chemical bond); to loosen (a filter bed)  
**auflösbar** dissolvable  
**Auflösbarkeit** *f* dissolvability  
**Auflöseholländer** *m* (pap) breaker (broke) beater  
**aufösen** 1. to dissolve; 2. to disintegrate (into constituent elements); to break [in, up], to repulp (waste paper)  
 ~/sich 1. to dissolve, to undergo dissolution; 2. to disintegrate (into constituent elements)  
 ~/sich wieder to redissolve  
**Auflösung** *f* 1. dissolution; 2. disintegration (into constituent elements); breaking, repulping (of waste paper); 3. s. Auflösungsvermögen  
 ~ *im Gestein* (geol) intrastatal solution  
 ~/spezifische (chromat) specific resolution  
**Auflösungsanalyse** *f* s. Voltammetrie/inverse  
**Auflösungsgeschwindigkeit** *f* dissolution rate  
**Auflösungsprozeß** *m* dissolving process  
**Auflösungsvermögen** *n* (anal, phot) resolving power, resolution  
**Aufmachungseinheit** *f* (text) package  
**Aufnahme** *f* 1. uptake, take-up (of substances), (by the human body:) intake; absorption, take-up, pick-up (of liquids); absorption (of gases); acceptance, acquisition (of electrons); 2. (phot) taking; 3. photograph, picture  
 ~/autoradiographische autoradiograph, radioautograph  
 ~/empfohlene tägliche recommended daily allowance, RDA (of nutrients)  
 ~/makrofotografische photomacrograph  
 ~/mikrofotografische photomicrograph  
 ~ von Fremdgerüchen foreign odour pickup  
**Aufnahmeelsen** *n* (glass) gathering iron  
**aufnahmefähig** absorptive, absorbent  
**Aufnahmefähigkeit** *f* [absorbing, absorption] capacity, absorptency  
**Aufnahmemasse** *f* loading (wood preservation)  
**Aufnahmematerial** *n* (phot) negative material  
**Aufnahmespule** *f* (text) winding bobbin  
**Aufnahmetisch** *m* (glass) casting table  
**Aufnahmevermögen** *n* capacity (of containing); [absorbing, absorption] capacity, absorptency

**aufnehmbar** absorbable; (agric) available (nutrients)  
**Aufnehmbarkeit** *f* absorbability; (agric) availability (of nutrients)  
**aufnehmen** 1. to take up (substances); (tox) to take in; to absorb, to take (pick) up (liquids); to absorb (gases); to gain, to accept, to acquire (electrons); 2. to take a photograph  
 ~/artfremden Geruch to pick up foreign odour  
 ~/Farbe (text) to take the dye  
 ~/Glas aus der Schmelze to gather glass  
**Aufnehmer** *m* s. 1. Absorptionsmittel; 2. Extraktionsmittel  
**Aufoxidation** *f* oxidation to higher valency, further oxidation  
**aufoxidieren** to oxidize to higher valency  
**aufpfropfen** to graft (polymers)  
**aufpolymerisieren** s. aufpfropfen  
**Aufprall** *m* impingement, impact[ion]  
**aufprallen** to impinge, to impact  
**Aufprallerosion** *f* impingement attack  
**aufpressen** (pap, text, tann) to emboss  
**aufquellen** to swell [up]  
**aufrahmen** (rubber, plast, food) to cream  
**Aufrahmungsfähigkeit** *f* creamability, creaming ability (potential, power)  
**Aufrahmungsmittel** *n* creaming agent  
**Aufrahmungspotential** *n*, **Aufrahmungsvermögen** *n* s. Aufrahmungsfähigkeit  
**Aufrahmungsvorgang** *m* creaming process  
**aufrauen** to roughen; (text) to raise [a nap], to nap  
**aufrechterhalten** to maintain, to keep up  
**Aufrechterhaltung** *f* maintenance, upkeep  
 ~ des Gleichgewichts keeping in equilibrium, equilibration  
**aufreißen** to break up (surfaces)  
**Aufreißen** *n* breaking-up, breakup (of surfaces)  
**Aufrollapparat** *m* (pap) reeling machine, reel[er], winder  
**aufrollen** (pap) to reel [up], to wind [up], to wind (work) up into a reel, to make into a roll; to roll, to fold back (a rubber stock)  
 ~/sich (ceram) to crawl (unintendedly during glazing)  
**Aufrollen** *n* (pap) reeling, winding; rolling, folding (of a rubber stock); (ceram) crawling (a defect during glazing)  
 ~/dichtes (pap) tight winding  
 ~/klang]hartes s. ~/dichtes  
**Aufrollstange** *f* (pap) winder (rewind) shaft  
**Aufrolltrommel** *f* (pap) reel-up drum (cylinder), reeling drum (cylinder)  
**Aufrollvorrichtung** *f* winding (wind-up) arrangement, winding equipment  
**aufrühren** to agitate, to stir up; to repulp, to reslurry  
**aufsättigen** to resaturate, to reconcentrate  
**Aufsättigung** *f* resaturation, reconcentration  
**aufsaugen** to suck (soak) up, to imbibe  
**Aufsaugen** *n*, **Aufsaugung** *f* suction, imbibition

**aufschäumbar** (plast) expandable, foamable  
**aufschäumbarkelt** *f* (plast) expandability, foamability  
**aufschäumen** to foam, to froth (a substance) to expand, to foam; (glass) to reboil; to foar froth [up], to effervesce (of a substance)  
**aufschäumend** effervescent, effervescing  
**Aufschlag** *m* impact, impingement  
**aufschlagen** 1. (pap) to refine, to clear, to l out, to break down, to potch, to poach; 2. handle, to haul (hides out of the tanning li  
**Aufschläger** *m* (pap) refiner, refining (perf engine, refining (perfecting) machine  
**aufschlännen** to suspend, to slurry  
**Aufschlammung** *f* suspension, slurry  
**aufschleßbar** digestible  
**Aufschleßbarkeit** *f* digestibility, digestibler  
**aufschleßen** to digest, to decompose, to o (by heat or solvents); (mine) to develop, t up; (biol) to macerate; (pap) to cook, to p reduce to pulp, to make into pulp; to repu (waste paper)  
 ~/intensiv to cook soft (cellulose)  
 ~/mit Säure to acidulate (calcium phosph manufacturing fertilizer phosphates)  
 ~/unvollständig to cook raw (cellulose)  
**Aufschleßgestell** *n* digestion stand (of a apparatus)  
**Aufschleßung** *f* s. Aufschluß  
**Aufschluß** *m* digestion, decomposition, op (by heat or solvents); (mine) developmen ing-up; (biol) maceration; (pap) cooking, t  
 ~/alkalischer (pap) alkaline pulping  
 ~/chemischer (pap) [full] chemical pulping  
 ~ des Holzes/mechanischer (pap) mecha (groundwood) pulping  
 ~/halbchemischer (pap) semichemical pul  
 ~ im Bombenrohr (Einschmelzrohr, Schi sealed-tube decomposition  
 ~ mit Säure (pap) acid pulping; acidulation cium phosphate for manufacturing fertiliz phates)  
 ~/saurer (pap) acid pulping  
**Aufschlußbohrung** *f* 1. exploration drilling exploration (exploratory) well, wildcat  
 ~/erfolglose unproductive well, dry hole, d  
**Aufschlußchemikalie** *f* s. Aufschlußmittel  
**Aufschlußgrad** *m* degree of digestion (dex tion); (pap) degree of cooking  
**Aufschlußlaugung** *f* s. Aufschlußlösung  
**Aufschlußlösung** *f* (pap) pulping (cooking tion) liquor; acidulant (fertilizer industry)  
**Aufschlußmittel** *n* digesting (decomposing (pap) pulping (cooking) agent (chemical)  
**Aufschlußmittelgemisch** *n* digestion mix  
**Aufschlußsäure** *f* acidulant (for manufact fertilizer phosphates)  
**Aufschlußverfahren** *n* decomposition pro (pap) pulping process

# LANGENSCHIEDTS ENZYKLOPÄDISCHES WÖRTERBUCH

DER ENGLISCHEN UND DEUTSCHEN SPRACHE

„Der Große Muret-Sanders“

TEIL II

## Deutsch-Englisch

1. BAND A—K

HERAUSGEGEBEN VON

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**Aufmast** *f* <-; no pl> *agr.* (von Tieren) fattening. — **auf,mä-sten** *v/t* <sep, -ge-, h> fatten.

**auf,mau-ern** *v/t* <sep, -ge-, h> (Wand etc) brick up.

**auf,mei-ßeln** *v/t* <sep, -ge-, h> 1. *tech.* open (s.th.) with a chisel. — 2. *med.* gouge, open (s.th.) with a gouge, *auch* trephine.

**auf,mer-ken** *v/i* <sep, -ge-, h> (auf *acc* to) pay attention, attend: gespannt ~ to pay close attention.

**auf,merk-sam** *I adj* 1. (auf *acc* to) attentive: ein ~er Beobachter an attentive observer; j-n auf etwas ~machen a) to call (od. draw) s.o.'s attention to s.th., b) to point s.th. out to s.o., c) (mahndend) to warn s.o. of s.th.; auf etwas ~werden to notice s.th., to become aware of s.th.; sie wurden auf ihn ~ they began to take notice of him; wir wurden darauf ~gemacht, daß wir were warned that; ich machte ihn auf seine Pflichten ~ I reminded him of his duties. — 2. (wachsam) watchful, alert, vigilant, (Augen) keen. — 3. (höflich, zuvorkommend) attentive, obliging, thoughtful: ~e Bedienung attentive service. — II *adv* 4. ~zuhören to listen attentively; etwas ~verfolgen to follow s.th. closely. — **Auf,merk-sam-keit** *f* <-; -en> 1. <only sg> attention: ~erregen to attract attention; j-s ~fesseln to hold s.o.'s attention; j-s ~auf (acc) etwas lenken to direct (od. turn) s.o.'s attention to s.th.; j-m [etwas] ~schenken to pay attention to s.o. [s.th.]; mit gespannter ~ with keen attention; mangelnde ~ lack of attention; das ist meiner ~entgangen that has slipped my attention (od. escaped my notice). — 2. <only sg> (Wachsamkeit) watchfulness, alertness, vigilance. — 3. *meist pl* (Zuvorkommenheit) attentiveness, obligingness, thoughtfulness, attentions *pl*: j-n mit ~en überschütten to shower s.o. with attentions. — 4. (kleines Geschenk) small token (od. gift), mark of regard (od. esteem). — 5. <only sg> *psych.* a) attention, (im weiteren Sinn) vigilance, watchfulness, b) (Wachsamkeit) attentiveness.

**auf,mes-sen** *v/t* <irr, sep, -ge-, h> 1. *civ. eng.* survey, measure. — 2. j-m eins ~ *fig. colloq.* to give s.o. a thrashing.

**auf,mi-schen** *v/t* <sep, -ge-, h> 1. (rubber) compound. — 2. *dial.* (Farben) mix (s.th.) up, remix.

**auf,mö-bel[n]** [-,mö:bəl] *colloq. I v/t* <sep, -ge-, h> 1. (mit Worten) cheer (od. buoy) up. — 2. (aufpulvern) brace (od. buck, stiffen) up: der Kaffee hat mich aufgemöbelt the coffee bucked me up. — II *v/reflex* sich ~ 3. (mit Kaffee etc) buck (od. wake) oneself up.

**auf,mon-tie-ren** *v/t* <sep, no -ge-, h> *tech.* (auf *acc*) mount (on), fit (to).

**auf,mucken** (getr. -k-k-), *auch* **auf,muck-sen** *v/t* <sep, -ge-, h> *colloq.* (gegen) kick (against) (*colloq.*), *bes. Br.* jib (at).

**auf,mun-tern** [-,mun:tərn] *I v/t* <sep, -ge-, h> 1. (aufheuern) cheer (od. buoy) (s.o.) up: j-n mit einem Scherz ~ to cheer s.o. up with a joke; sich (od. einander) ~ to cheer each other up. — 2. j-n zu etwas ~ to encourage s.o. to s.th. — II *A n* <-s> 3. *verbal noun*. — 4. *cf.* Aufmunterung. — **Auf,mun-te-rung** *f* <-; no pl> 1. cheering up: ich brauche eine kleine ~ *colloq.* I need s.th. to cheer me up. — 2. (zu einer Tat) encouragement.

**auf,müt-zen** *v/t* <sep, -ge-, h> *obs. od. dial.* for vorwerfen 2.

**auf,na-geln** *v/t* <sep, -ge-, h> 1. (auf *acc* on) nail (down). — 2. Futterholz ~ *civ. eng.* to fur.

**Auf,näh-ar-beit** *f* (textile) appliqué (work), Sabrina work. — **auf,nä-hen** *v/t* <sep, -ge-, h> 1. sew on: Perlen auf ein Kleid ~ to sew pearls on (to) a dress; eine Applikation auf (acc) etwas ~ to appliqué s.th. — 2. (Rocksaum etc) raise. — **Auf,nä-her** *m* <-s> -> (fashion) tuck.

**Auf,nah-me** *f* <-; -n> 1. <only sg> *auch fig.* reception: j-m eine freundliche ~ bereiten to receive s.o. in a friendly manner, to give s.o. a friendly welcome; eine kühle ~ finden to meet with a cool reception; das Buch fand eine günstige ~ the book met with a favourable reception. — 2. (Eindrücke, Details, Wissen) grasp, take in, receive, apprehend, absorb: etwas nur mit dem Gehör ~ to apprehend s.th. aurally; etwas in sich ~ to absorb s.th. — 7. es mit j-m ~ (können) to be able to cope with s.o., to be a match for s.o.: ich kann es nicht mit ihm ~ I am no match for him; im Reiten kann ich es jederzeit mit ihm ~ I can take him on any time at riding; keiner konnte es so leicht (od. bald) mit ihr ~ nobody could match her so easily. — 8. (fassen) (Ware, Passagiere etc) hold, take, accommodate: das Flugzeug kann 100 Passagiere ~ the plane can seat a hundred passengers. — 9. *cf.* aufheben 1, hochheben 1, 5. — 10. *phot.* a) (Bsp. Landkarte etc) a) to take, to photograph, to shoot, b) (Kamera) ready for shooting. — **be,reit-schaft** *f* (der Zuhörer etc) receptivity, receptiveness. — **be,schrän-kung** *f* *ped.* admission restriction. — **da-ten** *pl* *phot.* exposure data. — **auf,näh-ig** *adj* 1. (geistig) (für to) receptive: ich bin nach der Arbeit nicht mehr ~ after work I am not capable of taking in anything. — 2. *econ.* (Markt) capable of absorbing, active, receptive. — **geistig** ~ he has an incredible receptivity of mind. — 2. *econ.* (des Marktes) absorbing capacity, receptiveness, receptivity. — 3. *phys.* capacity. — 4. *phys.* (Magnetismus) susceptibility. — 5. *chem.* absorption power. — 6. (beim Radar) pick-up performance. — **ge,bühr** *f* admission fee. — **ge,län-de** *n* (film) lot, location. — **ge,rät** *n* 1. recording equipment, recorder. — 2. (film) *phot.* camera. — 3. *civ. eng.* surveying apparatus. — **ge,such** *n* application for admission. — **land** *n* *pol.* (für Flüchtlinge etc) host country. — **lei-ter** *m* 1. (beim Film) production manager. — 2. (beim Rundfunk) recording manager. — **ob,jek-tiv** *n* *phot.* 1. photographic lens. — 2. (Gegensatz zu Sucherobjektiv) taking lens. — **prü-fung** *f* 1. entrance examination. — 2. qualifying examination. — **raum** *m* (film, radio) studio. — **röh-re** *f* *telev.* pickup tube. — **stand,punkt** *m* *phot.* viewpoint. — **stel-lung** *f* *mil.* covering position. — **stu-dio** *n* *cf.* Aufnahmeraum. — **tag** *m* 1. (im Krankenhaus etc) day of admission. — 2. (film) day of filming. — 3. (radio) day of recording. — **tech-nik** *f* 1. *phot.* photographic (od. shooting) technique. — 2. (radio) recording technique. — **ver-fah-ren** *n* 1. (film) filming technique. — 2. (radio) recording technique. — **ver,mö-gen** *n* *cf.* Aufnahme-fähigkeit. — **vor,rich-tung** *f* *tech.* (für Werkstücke) workholding fixture. — **wa-gen** *m* 1. (für Tonaufnahmen) recording van. — 2. *telev.* pickup van. — 3. (film) dolly. — **wil-lig** *adj* *cf.* aufnahmebereit 1. — **wil-lig-keit** *f* <-; no pl> *cf.* Aufnahmebereitschaft. — **wür-dig** *adj* worthy of admittance. — **zap-fen** *m* *tech.* (eines Werkzeugs) tang.

come popular. — 2. <only sg> (einer Tätigkeit) start(ing), beginning, taking up: nach ~ der Arbeit after having taken up the job; ~ von Verhandlungen *pol.* initiation of negotiations. — 3. <only sg> (von Beziehungen, Kontakten) establishment, taking up: die ~ von freundschaftlichen Beziehungen the taking up of friendly relations. — 4. <only sg> (Beginn, Eröffnung) opening: die ~ des Transatlantikverkehrs the opening of (the) transatlantic traffic. — 5. <only sg> (in eine Organisation, Schule etc) admission, admittance, acceptance: um ~ nachsuchen to apply for admission; die ~ neuer Mitglieder the admission of new members; j-m ~gewähren to take s.o. in. — 6. <only sg> (Einbeziehung) inclusion, adoption, incorporation: das Wort fand ~ in die deutsche Sprache the word was adopted into the German language. — 7. <only sg> (von Details, Eindrücken etc) grasping, taking in, reception, apprehension, absorption. — 8. (im Krankenhaus) reception (office). — 9. *phot.* a) (Vorgang) taking (a photograph, a picture), photographing, b) (Bild) photo(graph), picture, shot, c) (einer Landschaft etc) view: eine ~ von j-m machen to take a photograph of s.o., to shoot a picture of s.o.; eine ~ vergrößern lassen to have a photograph enlarged. — 10. (film) a) (Tätigkeit) shooting (of a film), b) (Bild) shot, shoot, take: Achtung, ~! action! camera! — 11. (Fernseh-aufnahme) a) take, b) pickup. — 12. (radio) a) (bes. auf Tonband) recording, b) (auf Schallplatte) pickup, *Am.* transcription: eine ~ von etwas machen to record s.th.; die Oper wurde als ~ gesendet the opera was broadcast as a recording. — 13. <only sg> *tech.* a) incorporation, accommodation, b) (Einbau) mounting, installation, c) (Einsetzen) insertion, d) (eines Werkzeuges) reception, e) (von Werkstücken auf der Maschine) holding, fixture, f) (eines Werkstücks in einem Halter) reception, g) (von Schnittkräften bei der Zerspaltung) absorption. — 14. *tech.* a) (eines Diamantenhalters) socket, b) (einer Schleifscheibe) adaptor, *auch* adapter, flange, c) (für Werkzeuge) fixture, (tool) carrier. — 15. *electr.* input. — 16. <only sg> *jur.* a) (eines Protokolls etc) drawing up, b) (eines Tatbestandes) taking down, deposition, c) (von Beweisen) taking, hearing, d) (einer Vertragsklausel etc) insertion, introduction, adoption, inclusion. — 17. <only sg> *econ.* a) (von Geld, Kapital, Hypothek) raising, taking up, b) (einer Anleihe) taking up, flotation, *auch* floatation, c) (von Schulden) contraction, d) (eines Wechsels) meeting, honoring, *bes. Br.* honouring, e) (des Inventars) taking (of the inventory), stocktaking, f) (der Waren auf dem Markt) absorption, uptake. — 18. <only sg> *med. biol.* a) (der Luft, Nahrung etc) reception, intake, b) (Assimilation) assimilation, absorption. — 19. <only sg> *phys.* (von Gas, Flüssigkeit) absorption. — 20. <only sg> *civ. eng.* (Vermessung) survey(ing), plotting. — 21. *geogr. geol.* a) (topographisch) mapping out, b) (einer Küste etc) survey: geologische ~ geological survey. — 22. <only sg> *metall.* a) absorption, b) (von Kohlenstoff im Schmelzofen) pickup. — 23. *arch.* measure. — 24. <only sg> *relig.* a) (in die Gemeinschaft der Kinder Gottes) adoption, b) (in den Himmel) assumption.

**Auf,nah-me,an,trag** *m* 1. application for admission. — 2. *pol.* motion of inclusion. — **ap,pa-rat** *m* rare camera. — **ate,lier** *n* (film od. photographer's) studio. — **be,din-gung** *f* *meist pl* *bes. pol.* condition (od. term) of admission (od. membership). — **be,reit** *adj* 1. (geistig) (für etwas to s.th., of s.th.) receptive. — 2. *phot.* a) (Kameramann etc) ready to shoot, b) (Kamera) ready for shooting. — **be,reit-schaft** *f* (der Zuhörer etc) receptivity, receptiveness. — **be,schrän-kung** *f* *ped.* admission restriction. — **da-ten** *pl* *phot.* exposure data. — **auf,näh-ig** *adj* 1. (geistig) (für to) receptive: ich bin nach der Arbeit nicht mehr ~ after work I am not capable of taking in anything. — 2. *econ.* (Markt) capable of absorbing, active, receptive. — **geistig** ~ he has an incredible receptivity of mind. — 2. *econ.* (des Marktes) absorbing capacity, receptiveness, receptivity. — 3. *phys.* capacity. — 4. *phys.* (Magnetismus) susceptibility. — 5. *chem.* absorption power. — 6. (beim Radar) pick-up performance. — **ge,bühr** *f* admission fee. — **ge,län-de** *n* (film) lot, location. — **ge,rät** *n* 1. recording equipment, recorder. — 2. (film) *phot.* camera. — 3. *civ. eng.* surveying apparatus. — **ge,such** *n* application for admission. — **land** *n* *pol.* (für Flüchtlinge etc) host country. — **lei-ter** *m* 1. (beim Film) production manager. — 2. (beim Rundfunk) recording manager. — **ob,jek-tiv** *n* *phot.* 1. photographic lens. — 2. (Gegensatz zu Sucherobjektiv) taking lens. — **prü-fung** *f* 1. entrance examination. — 2. qualifying examination. — **raum** *m* (film, radio) studio. — **röh-re** *f* *telev.* pickup tube. — **stand,punkt** *m* *phot.* viewpoint. — **stel-lung** *f* *mil.* covering position. — **stu-dio** *n* *cf.* Aufnahmeraum. — **tag** *m* 1. (im Krankenhaus etc) day of admission. — 2. (film) day of filming. — 3. (radio) day of recording. — **tech-nik** *f* 1. *phot.* photographic (od. shooting) technique. — 2. (radio) recording technique. — **ver-fah-ren** *n* 1. (film) filming technique. — 2. (radio) recording technique. — **ver,mö-gen** *n* *cf.* Aufnahme-fähigkeit. — **vor,rich-tung** *f* *tech.* (für Werkstücke) workholding fixture. — **wa-gen** *m* 1. (für Tonaufnahmen) recording van. — 2. *telev.* pickup van. — 3. (film) dolly. — **wil-lig** *adj* *cf.* aufnahmebereit 1. — **wil-lig-keit** *f* <-; no pl> *cf.* Aufnahmebereitschaft. — **wür-dig** *adj* worthy of admittance. — **zap-fen** *m* *tech.* (eines Werkzeugs) tang.

**auf,nah-me** *f* <-; no pl> *cf.* Aufnahmebereitschaft. — **wür-dig** *adj* worthy of admittance. — **zap-fen** *m* *tech.* (eines Werkzeugs) tang.

**auf,nah-me,fä-hig** *adj* Austrian for aufnahme-fähig. — **A-,prü-fung** *f* Austrian for Aufnahmeprüfung.

**auf,neh-men** *I v/t* <irr, sep, -ge-, h>

1. receive (*auch fig.*): j-n freundlich ~ to receive s.o. in a friendly manner; j-n bei sich (od. in seinem Haus) ~ a) to accommodate s.o., to put s.o. up, b) to take s.o. in: das Stück wurde begeistert aufgenommen the piece was received enthusiastically; wie hat er die Nachricht aufgenommen? how did he take (od. receive) the news? how did he react when he heard the news? er nahm es gut [schlecht] auf he took it well [badly]; die Dunkelheit nahm sie auf *lit.* they were swallowed (up) by darkness. — 2. (Tätigkeit) start, take up, begin: er nahm gestern die Arbeit bei uns auf he started work with us yesterday; den Betrieb ~ to start operations; die Verfolgung ~ to take up the pursuit; Ermittlungen ~ to start investigations; die Diskussion erneut (od. von neuem) ~ to resume the discussion; → Kampf 6; Spur 1. — 3. (Beziehungen, Kontakte) take up, enter into, establish: Handelsbeziehungen ~ to enter into trade relations; Fühlung mit j-m ~ to enter into contact with s.o.; → Verhandlung 2. — 4. (in Partei, Schule etc) (in *acc*, *auch dat*) admit (to), accept (into), receive: j-n als Mitglied ~ to accept s.o. as a member; sich in einen Verein ~ lassen to join a society. — 5. (ein-beziehen) include, adopt: etwas in den Spielplan [die Tagesordnung] ~ to include s.th. in the repertoire [agenda]; in (*acc*) etwas aufgenommen werden to find entrance into s.th.; etwas zusätzlich ~ to add s.th.; etwas in sein Gebet ~ to include s.th. in one's prayer. — 6. (Eindrücke, Details, Wissen) grasp, take in, receive, apprehend, absorb: etwas nur mit dem Gehör ~ to apprehend s.th. aurally; etwas in sich ~ to absorb s.th. — 7. es mit j-m ~ (können) to be able to cope with s.o., to be a match for s.o.: ich kann es nicht mit ihm ~ I am no match for him; im Reiten kann ich es jederzeit mit ihm ~ I can take him on any time at riding; keiner konnte es so leicht (od. bald) mit ihr ~ nobody could match her so easily. — 8. (fassen) (Ware, Passagiere etc) hold, take, accommodate: das Flugzeug kann 100 Passagiere ~ the plane can seat a hundred passengers. — 9. *cf.* aufheben 1, hochheben 1, 5. — 10. *phot.* a) (Bsp. Landkarte etc) a) to take, to photograph, to shoot, b) (Kamera) ready for shooting. — **be,reit** *adj* 1. (geistig) (für etwas to s.th., of s.th.) receptive. — 2. *phot.* a) (Kameramann etc) ready to shoot, b) (Kamera) ready for shooting. — **be,reit-schaft** *f* (der Zuhörer etc) receptivity, receptiveness. — **be,schrän-kung** *f* *ped.* admission restriction. — **da-ten** *pl* *phot.* exposure data. — **auf,näh-ig** *adj* 1. (geistig) (für to) receptive: ich bin nach der Arbeit nicht mehr ~ after work I am not capable of taking in anything. — 2. *econ.* (Markt) capable of absorbing, active, receptive. — **geistig** ~ he has an incredible receptivity of mind. — 2. *econ.* (des Marktes) absorbing capacity, receptiveness, receptivity. — 3. *phys.* capacity. — 4. *phys.* (Magnetismus) susceptibility. — 5. *chem.* absorption power. — 6. (beim Radar) pick-up performance. — **ge,bühr** *f* admission fee. — **ge,län-de** *n* (film) lot, location. — **ge,rät** *n* 1. recording equipment, recorder. — 2. (film) *phot.* camera. — 3. *civ. eng.* surveying apparatus. — **ge,such** *n* application for admission. — **land** *n* *pol.* (für Flüchtlinge etc) host country. — **lei-ter** *m* 1. (beim Film) production manager. — 2. (beim Rundfunk) recording manager. — **ob,jek-tiv** *n* *phot.* 1. photographic lens. — 2. (Gegensatz zu Sucherobjektiv) taking lens. — **prü-fung** *f* 1. entrance examination. — 2. qualifying examination. — **raum** *m* (film, radio) studio. — **röh-re** *f* *telev.* pickup tube. — **stand,punkt** *m* *phot.* viewpoint. — **stel-lung** *f* *mil.* covering position. — **stu-dio** *n* *cf.* Aufnahmeraum. — **tag** *m* 1. (im Krankenhaus etc) day of admission. — 2. (film) day of filming. — 3. (radio) day of recording. — **tech-nik** *f* 1. *phot.* photographic (od. shooting) technique. — 2. (radio) recording technique. — **ver-fah-ren** *n* 1. (film) filming technique. — 2. (radio) recording technique. — **ver,mö-gen** *n* *cf.* Aufnahme-fähigkeit. — **vor,rich-tung** *f* *tech.* (für Werkstücke) workholding fixture. — **wa-gen** *m* 1. (für Tonaufnahmen) recording van. — 2. *telev.* pickup van. — 3. (film) dolly. — **wil-lig** *adj* *cf.* aufnahmebereit 1. — **wil-lig-keit** *f* <-; no pl> *cf.* Aufnahmebereitschaft. — **wür-dig** *adj* worthy of admittance. — **zap-fen** *m* *tech.* (eines Werkzeugs) tang.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,187	06/13/2001	Kurt Ryf	39021-172671	3997

7590 05/06/2004

VENABLE, BAETJER, HOWARD & CIVILETTI, LLP  
P.O. Box 34385  
Washington, DC 20043-9998

EXAMINER

MILLER, EDWARD A

ART UNIT PAPER NUMBER

3641

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

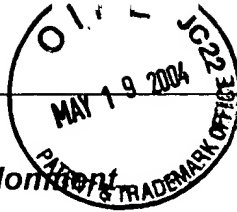
## DATES DOCKETED

PETITION TO REOPEN  
DUE: 7/6/04  
CAU: 6/6, 6/22, 6/30  
DKTED BY: [signature]

MAY -7 2004

PTO DOCKETING DEPARTMENT

**Notice of Abandonment**



Application No.

09/879,187

Examiner

Edward A. Miller

Applicant(s)

RYF ET AL.

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 21 October 2003.
  - (a) ☐ A reply was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply (including a total extension of time of \_\_\_\_\_ month(s)) which expired on \_\_\_\_\_.
  - (b) ☐ A proposed reply was received on \_\_\_\_\_, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.  
(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
  - (c) ☒ A reply was received on 21 November 2003 but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
  - (d) ☐ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
  - (a) ☐ The issue fee and publication fee, if applicable, was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
  - (b) ☐ The submitted fee of \$\_\_\_\_\_ is insufficient. A balance of \$\_\_\_\_\_ is due.  
The issue fee required by 37 CFR 1.18 is \$\_\_\_\_\_. The publication fee, if required by 37 CFR 1.18(d), is \$\_\_\_\_\_.
  - (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
  - (a) ☐ Proposed corrected drawings were received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply.
  - (b) ☐ No corrected drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☐ The decision by the Board of Patent Appeals and Interference rendered on \_\_\_\_\_ and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☒ The reason(s) below:  
  
See next page.

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

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1. The replies filed on November 21, 2003 and January 28, 2004 are not fully responsive to the prior Office Action for reasons set forth below. Since the period for reply set forth in the prior Office action has expired, this application will become abandoned unless applicant corrects the deficiency and obtains an extension of time under 37 CFR 1.136(a).

The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. In no case may an applicant reply outside the SIX (6) MONTH statutory period or obtain an extension for more than FIVE (5) MONTHS beyond the date for reply set forth in an Office action. A fully responsive reply must be timely filed to avoid abandonment of this application.

2. Since the maximum extension of time permissible under 37 CFR 1.136(a) has expired, this application stands abandoned for failure to properly reply, as set forth below.

3. In Paper No. 11, mailed October 21, 2003, applicants were required to complete their response, and were given a one month timer period to complete that response. In accordance with MPEP 714.03, in pertinent part, "once an inadvertent omission is brought to the attention of the applicant, the question of inadvertence no longer exists. Therefore, a second Office action giving another new (1 month) time period to supply the omission would not be appropriate under 37 CFR 1.135(c)." Further, 37 CFR 1.135(b) and 1.111(b) were not merely quoted by number, but were copied and set forth in the action, page 2, paragraph 1, to inform applicants.

4. The ostensible amendments to claims 17-18, as to which applicants maintain their traverse or the restriction requirement, are not reasonably responsive to the rejections under 35 USC 112, nor are the rejections under 35 USC 112, 2<sup>nd</sup> paragraph suitably argued. The term "powder" was stated to be a problem in the rejection as to many claims including claim 14, e.g., and which term

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"powder" was deleted at the end of claim 14, and deleted from claims 15 and 16. Thus, applicants acquiesced as to the rejection in this aspect. However, this identical term "powder" was inserted into claim 17, and retained in claim 17. Thus, the reply including arguments and amendments to the claims cannot reasonably be found to be complete or bona fide. Further, there is no argument at all for claim 17 as to 35 USC 112, 2<sup>nd</sup> paragraph, and the remarks about claim 18 do not address the substantive content of the rejection of all the claims for indefiniteness. "Comprising" in claim 18 does not address any omitted claim element from claim 18.


5. Applicants filed an amendment on January 28, 2004, in which they stated that "This AMENDMENT is presented to be considered in conjunction with previous response filed in reply to Paper No. 11." This is taken to mean that applicants intended the amendment to be part of the reply to Paper No. 11. However, this was not presented within the one month time for response of Paper No. 11. Further, there was no request for an extension of time, nor any authorization to charge a deposit account on applicants' behalf. Thus, this response is untimely. As the maximum extension time of up to 6 months from October 28, 2003, under 37 CFR 1.136(a), has expired, no time remains within which to complete the response, e.g., by an extension of time.

6. Any inquiry concerning either this or an earlier communication from the Examiner should be directed to Examiner Edward A. Miller at (703) 306-4163. Examiner Miller may normally be reached Monday-Thursday, from 10 AM to 7 PM.

If attempts to reach Examiner Miller by telephone are unsuccessful, his supervisor Mr. Carone can be reached at (703) 306-4198.

If there is no answer, or for any inquiry of a general nature or relating to the application status, please call the Group receptionist at (703) 308-1113.

Miller/em  
May 3, 2004



EDWARD A. MILLER  
PRIMARY EXAMINER